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# PATENT SPECIFICATION

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## COMPLETE SPECIFICATION

### DRAWINGS ATTACHED

#### Improvements in or relating to Devices for Trimming Grass at the Edges of Lawns

We, JOHN MAXWELL MARSHALL, a British subject, of 15, Cheriton Avenue, Bromley, Kent, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to edge trimmers and cutters for trimming the edges of grass lawns and is more particularly concerned with appliances for the stated purpose which consist of a rotary cutter and a roller of smaller diameter than that of the cutter, both concentrically mounted upon a spindle to which a handle may be attached.

The primary object of the present invention is to provide a modified construction of such edge trimmers and cutters which will be particularly adapted to the trimming of the edge of a grassed area bordered by a stone, paved, or concrete surface (hereinafter referred to as the path). In operating the majority of edge trimmers mounted upon rollers the roller is propelled over the surface of the grass and the edge is trimmed by a clipping action resulting from the employment of various forms of rotary shears or blades. These are particularly adapted to trimming the edges of lawns bordered by soft earth which offers little resistance to the portions of the cutters which at any time are moving below the level of the lawn surface.

The most common situation of a lawn bordered by a hard-edged path is that in which the lawn is slightly higher than, or on the same level as, the path. In this situation the grass, roots and earth tend to spread onto the surface of the path, and to trim the edge it is necessary to sever the debris along the line of the path and remove it. Devices employing rotary shears, star wheels and the like, co-operating with a fixed blade are ineffective in these circumstances since the

compacted earth of the lawn on the one side, and the hard surface of the path on the other, do not permit the cutters or the fixed blade to penetrate.

The device described in this specification is essentially a rotary edging trowel designed primarily for penetrating earth and severing matted vegetation. The roller moves on the surface of the path and the edge of the lawn is trimmed by the penetration of a rotary cutter into the earth along the line between the lawn and the path and by the shearing action of the cutter in co-operation with the edge of the path.

In the preferred form of the device the spindle is mounted at one end only to a handle, the roller being positioned between the handle and the rotary cutter. The operation of the device requires considerable force to be applied to the cutter in both a horizontal direction away from the operator and a vertical direction towards the ground. To enable the operator to apply this force by means of his foot a footrest or pedal, which may be rigid or folding, is attached to the handle.

A scraper is mounted on the handle along one edge for the purpose of cleaning the roller and the adjacent face of the cutter of adhering grass and earth.

In order that the said invention may be clearly understood and readily carried into effect the same will now be more fully described with reference to the accompanying drawing.

In the invention as illustrated in this drawing the roller is indicated at a. The rotary cutter is in the form of a thin disc, which is indicated at b and is secured in position to end of the roller. The said rotary cutter is of greater diameter than the roller, and its outer peripheral edge, which may be a plain circle, or serrated, or sprocket-toothed, is pre-

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ferably chamfered on the side opposite the roller.

The cutter and roller rotate freely about a spindle c, being retained on the spindle at one end by a stud or head recessed into the circular cutter so that its end is flush with the outer face of the cutter. The other end of the spindle protrudes beyond the roller and is mounted on, and at right angles to, the lower end of an upwardly extended handle d by which the device is held by the user. Alternatively the spindle carrying the roller and cutter may be mounted with its ends in two jaws or side-plates carried at the end of the handle.

The footrest or pedal e may be fixed rigidly to the handle, jaws or side-plates by means of a clamp, bolts, screws or angle bracket. Alternatively it may be attached to the handle, jaws or side-plates by means of a hinge so that it may be rotated upwards about the hinge to lie along the handle for convenience in packing for transport or storage.

The scraper f is a plate with one straight edge in sliding contact with the curved face of the roller and another straight edge in sliding contact with the adjacent face of the rotary cutter; these edges serving to maintain the roller and the said face of the cutter in a clean and efficient working condition. The scraper is mounted by being attached along another straight edge to the handle d and may be supported additionally by attachment to the footrest when the footrest is fixed, or to a separate bracket attached

rigidly to the handle when the footrest is of the hinged type.

#### WHAT WE CLAIM IS:—

1. An edge trimmer for trimming the edges of lawns, of the type in which a rotary cutter and a roller rotate together on a spindle mounted on a handle or between two jaws or side-plates, which has a footstep or pedal attached rigidly or by means of a hinge to the handle or jaws or side-plates.

2. An edge trimmer for trimming the edges of lawns having a rotary cutter and a roller carried on the same spindle which is mounted on a handle, in which the curved surface of the roller and one face of the cutter are cleaned of adhering earth and debris by means of a scraper in the form of a plate mounted by attachment along one edge to the handle.

3. An edge trimmer as claimed in claim 2 in which the scraper is additionally attached to a footrest or bracket secured to the handle.

4. An edge trimmer substantially as hereinbefore described with reference to the accompanying drawing.

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COMPLETE SPECIFICATION

1 SHEET.

*This drawing is a reproduction of  
the Original on a reduced scale*

